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ABSTRACT OF THE DISCLOSURE

An embodiment of the invention provides a method for training a system to inspect a spatially distorted pattern. A digitized image of an object, including a region of interest, is received. The region of interest is further divided in to a plurality of sub-regions. A size of each of the sub-regions is small enough such that a conventional inspecting method can reliably inspect each of the sub-regions. A search tool and an inspecting tool are trained for a respective model for each of the sub-regions. A search tree is built for determining an order for inspecting the sub-regions. A coarse alignment tool is trained for the region of interest.

Another embodiment of the invention provides a method for inspecting a spatially distorted pattern. A coarse alignment tool is run to approximately locate a pattern. Search tree information and an approximate location of a root image, found by the coarse alignment tool, is used to locate sub-regions sequentially in an order according to the search tree information. Each of the sub-regions is inspected, the sub regions being small enough such that a conventional inspecting method can reliably inspect each of the sub-regions.